

KOPIE

PATENT SPECIFICATION

DRAWINGS ATTACHED

1,182,742



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COMPLETE SPECIFICATION

Stud Member for Securing Together Overlapping Layers of Material

I, ARTUR FISCHER, a German citizen, of Tumlingen, Kreis Freudenstadt, Germany, do hereby declare the invention, for which I pray that a patent may be granted to me, 5 and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to a stud member 10 for securing together overlapping layers of material, particularly, but not exclusively, the overlapping edges of an insulating sleeve placed around a heating pipe, or of a sheath placed around such a sleeve.

The invention provides a stud member 15 for securing together overlapping layers of material, said member comprising a shank provided with a head at one end and having a longitudinal bore, the shank being tapered towards its free end and having a circumferential recess between the tapered portion 20 of the shank and the head so that by means of an awl inserted through the bore in the stud member, from the head end thereof, the overlapping layers of material to be 25 secured can be pierced and the tapered shank can be threaded through the resulting holes until the said layers pass into the recess in said shank and become retained therein.

30 Preferably the tapered portion of the shank is of frusto-conical shape.

In a preferred embodiment the awl is so dimensioned that when passed through the stud member until the head of the latter 35 abuts against a rearward part of the awl the point of the awl becomes positioned to form a continuation of the tapered profile of the stud member.

The invention is illustrated by way of 40 example in the accompanying drawing, the single figure of which is an elevation, partly in section, of a stud member and associated awl inserted through overlapping layers of

material.

Referring to the drawing, a stud member 45 comprises a shank 1 having a mushroom-shaped head 2 at one end and a frusto-conical portion 3, tapering away from the head 2, at the other end. A circumferential recess is provided between the head 2 and 50 the frusto-conical portion 3 as shown. The stud is also provided with a longitudinal bore 4 into which an awl 5 having a pointed end 6 and a handle 7 can be inserted. The reference numerals 8 and 9 indicate the overlapping edges of an insulating sleeve.

Insertion of the stud member takes place in such a way that the awl 5 is pushed into the bore 4 of the stud until the head 2 abuts against the front end of the handle 7 60 of the awl 5. The pointed end 6 of the awl 5 then forms a continuation of the frusto-conical portion 3 of the stud. With the awl 5 thus prepared, the awl 5 is driven to pierce a hole in the overlapping edges 8 and 9. 65 The awl 5, with the stud in place thereon, is then pushed further into the hole until the edges of the hole engage in the circumferential recess of the stud. The awl 5 is then withdrawn from the axial bore 4, leaving 70 the stud in position connecting the overlapping edges 8 and 9.

An advantage of the above described embodiment is that the stud can be inserted in one operation, which eliminates the disadvantage of known studs which require a hole to be made with a separate tool which hole is difficult to find again when the stud is inserted therein some time after the making of the hole. Moreover, insertion of the 80 stud is possible using only one hand, so that the other hand can be used, for example, to hold together the overlapping edges to be secured. This has not been possible with studs of known type which usually require 85 manipulation with both hands.

[Price

WHAT I CLAIM IS:—

1. A stud member for securing together overlapping layers of material, said member comprising a shank provided with a head at one end and having a longitudinal bore, the shank being tapered towards its free end and having a circumferential recess between the tapered portion of the shank and the head so that by means of an awl 5 inserted through the bore in the stud member, from the head end thereof, the overlapping layers of material to be secured can be pierced and the tapered shank can be threaded through the resulting holes until 10 the said layers pass into the recess in said shank and become retained therein.
2. A stud member as claimed in claim 1, in which the tapered portion of the shank is of frusto-conical shape.
- 15 3. A stud member as claimed in claim 20

1 or 2, in combination with an awl for inserting the same into materials to be secured, the said awl being so dimensioned that when passed through the stud member until the head of the latter abuts against 25 a rearward part of the awl the point of the awl becomes positioned to form a continuation of the tapered profile of the stud member.

4. A stud member substantially as described herein with reference to the accompanying drawing.

5. A stud member as claimed in claim 3, in combination with an awl substantially as described herein with reference to the 35 accompanying drawing.

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COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of
the Original on a reduced scale.*

